

REMARKS

Claims 15-45 are currently pending in the application. Claim 45 is currently amended to correct a typographical error. No new matter has been added. Entry of this after-final amendment response is respectfully requested.

I. Rejections of the Claims under 35 USC § 103(a)

Claims 15-24, 26-34, and 36-44 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,289,335 B1 issued to Downing et al. (hereinafter Downing) in view of Lindsay et al. (1986) (hereinafter Lindsay.) Applicants respectfully traverse.

Claim 15 recites at least the following limitations. Claims 26 and 36 also recite similar limitations.

establishing a view of at least one of said database recovery logs;
issuing a database statement to query said view;
retrieving data from at least one of said database recovery logs in response to said database statement; and
(emphasis added.)

A. The final Office action appears to allege that Downing's order log or order line log represents a view of the master log which serves as the recovery log for the master table because the master logs "record the primary key values, the filter values, and information about the modification for each row that is inserted, deleted, or modified in a corresponding master table." See item & on p. 3 of the April 01, 2009 final Office action. That is, the final Office action appears to allege that Downing's master logs as disclosing the claimed limitation of "the database recovery logs" and that Downing's order log as disclosing the claimed limitation of "a view of the at least one of said database recovery logs". Applicants respectfully disagree.

Applicants respectfully submit that Downing's order logs and order_line logs appear to be the master logs, rather than some views of their corresponding master logs as the final Office action alleges.

(a) Applicants respectfully point to Fig. 12 which, according to Downing's own description, "depicts exemplary snapshots and master log used to illustrate the operation of a fast refresh operation." Col. 4, ll. 48-49 (emphasis added.) That is, Fig. 12 depicts Downing's operation of fast refresh operation with the use of master log.

Nonetheless, Fig. 12 merely shows the following four entities – the old order_line snapshot, 1200, the new order_line snapshot, 1202, the order_line log, 1204, and the order log, 1206. That is, Fig. 12 contains two snapshots (1200 and 1202) and two logs (the order_line log and the order log), at least one of which must be the master log according to Fig. 12's own description.

Applicants respectfully submit that Downing appears to use the term master log to generally refer to a log that stores the primary key values, the filter values, and information about the modification for each row that is inserted. Applicants further respectfully submit that Downing appears to use the term order log / order_line log and master log interchangeable. For example, Downing explicitly discloses that "lo[r]der line log 1204 is a master log of changes" Col. 10, ll. 31-33 (emphasis added.) That is Downing first defines what constitutes a master log in col. 6, ll. 55-63 and considers the order_line log to be a master log due to the content of the order_line log.

Therefore, Downing's order_line log is a master log, rather than a view of the master log as the final Office action appears to allege.

(b) Applicants further respectfully submit that Downing's order log is also a master log itself, rather than a view of its corresponding master log.

In explaining the content of the order log 1206 and order line log 1204, Downing explicitly states that "[o]rder line log 1204 is the same as order line log 402 in FIG. 4(c) . . . , col. 10, ll. 33-35, and that "[s]imilarly, order log 1206 and customer log 1208 are the same as order log 502 in FIG. 5(C) and customer log 602" Col. 10, ll. 35-38. That is, except for the difference in the values of the order log and the order line log in FIG. 12, Downing's order log 1206 is the same as the order log 502, and order line log 1204 is the same as the order line log 402.

Downing further discloses that “[i]n FIG. 4(b), a row 412 is added to order line log 402 as the result of deleting an order line with an OLID of 3 from order line table 400. Consequently, the primary key value of the deleted row, 3, is recorded in order log row 412”, col. 7, ll. 33-36, and that “[i]n FIG. 5(b), table 500 has been modified as the result of changing the customer identifier from 2 to 5 for the order identified by an OID of 4 in order table 500. Consequently, the primary key value of 4 is stored in a new entry 512 of order log 502 to identify the modified row”, col. 7, ll. 54-58.

That is, both the order log 502 and the order line log 402 are used to store modification to their corresponding tables. Therefore, Applicants respectfully submit that Downing’s order log 1206 in Fig. 12 is also a master log itself, rather than a view of its corresponding master log.

Therefore, Applicants respectfully submit that both the order log and the order line log of Downing are themselves the master logs, rather than views of master logs, rather than some views of their corresponding master logs.

(c) In contrast, claim 15 first requires “at least one of said database recovery logs” and “establishing a view of the at least one of said database recovery logs”. On the other hand, Downing merely discloses order logs and order line logs, both of which as master logs, rather than some views of their corresponding master logs as the final Office action alleges. Therefore, Applicants respectfully submit that Downing does not disclose, teach, or suggest the claimed limitations of “at least one of said database recovery logs” and “a view of the at least one of said database recovery logs”, much less other claimed limitations interrelating with the aforementioned limitations.

(d) In addition, Applicants respectfully submit that Downing does not disclose, teach, or suggest at least the claimed limitation of “insulating said view from a format of the at least one of said database recovery logs”.

(i) The final Office action cites Figs. 5(a)-(c) of Downing and alleges that the cited figures render the aforementioned claimed limitations obvious. Applicants respectfully disagree.

Downing's Figs. 5(a)-(c) depict the addition of entries to the order log, 502, due to the modifications made to the corresponding order table, 500. Nonetheless, as explained above in subsections (a)-(b) of this paper, Downing's order log 502 is a master log instead of a view of the master log. Therefore, Downing fails to disclose, teach, or suggest the claimed limitation of "insulating said view from a format of the . . . database recovery logs" because the one entity (the order log) cannot be insulated from itself (the master log).

(ii) Applicants have advanced the following arguments in this subsection in Applicants' previously filed response to non-final Office action. Applicants respectfully ask the Examiner to respond to the arguments below in the Advisory action.

To the extent that the Office action were to consider the order table 500 and the order 502 in Figs. 5(a)-(c) as respectively disclosing the limitation of "database recovery logs" and "a view", it can be seen that the format of the order table 500 and the order log 502 are closely tied together.

For example, Downing discloses that "CHG\$\$ is a bit vector that indicates which column in particular has a new or changed value", col. 7, ll. 27-29, and that "CHG\$\$ has a zero in the first position of the bit vector to indicate that the OID column was unchanged and a one in the next position to indicate that the CID column was changed." Col. 7, ll. 61-64. That is, the CHG\$\$ bit vector in the order log 502 stores, in a bit, a zero where there is no change in the corresponding column and a "one" where there is a change in the corresponding column. In other words, in Fig. 5(a), the CHG\$\$ bit vector stores the value of "01. . ." which indicates that there is no change in the first column (and hence a value of "0" in the first bit), and that there is a change in the second column (and hence a value of "1" in the second bit.)

Therefore, it can be clearly seen that the format of the order log not only is not insulating from but is in fact closely tied with the format of the order table 500. For example, should the OID and CID columns of the order table 500 exchanges the column orders, the CHG\$\$ field of item 512 will change from "01. . ." to "10. . .".

Based at least upon the foregoing reasons and the fact that Lindsay fails to cure Downing's deficiencies, Applicants respectfully submit that Downing and Lindsay, either

along or combined, do not disclose, teach, or suggest all the claimed limitations of claims 15, 26, 36, and their respective dependent claims and thus may not be used to preclude their patentability under 35 U.S.C. § 103(a).

II. Rejections of the Claims under 35 USC § 103

Claims 25, 35, and 45 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,289,335 B1 issued to Downing et al. (hereinafter Downing.) Applicants respectfully traverse. Applicants further respectfully submit that Applicants have submitted the following arguments in Applicants' previously filed response to non-final Office action. Applicants respectfully ask the Examiner to formally respond to the arguments below in order for Applicants to properly form a decision to file RCE or to appeal.

Claim 25 recites the limitation of "wherein the format of said virtual table remains unchanged without modifying a query statement corresponding to the virtual table when the format of said recovery logs changes." Claims 35 and 45 also recite similar limitations.

A. Applicants respectfully submit that because Downing does not disclose all the claimed limitations of claims 1, 26, and 36 from which claims 25, 35, and 45 depend, Downing may not be used to preclude the patentability of claims 25, 35, and 45 under 35 U.S.C. § 103(a) for at least the foregoing reasons as presented above in subsection I.

B. Applicants further respectfully submit that Downing and Lindsay do not disclose the claimed limitation of claims 25, 35, and 45.

The Office action appears to consider Downing's "virtual table" as disclosing the limitation of "the view". See item #24, p. 6, September 24, 2008 Office action. Applicants first respectfully submit that Downing does not disclose "virtual tables".

To the extent that the Office action considers the table generated as a result of querying against the ORDER_LINE_LOG, the Office action concedes that "the format of the respective virtual table is defined by the query definitions which result the format being different from that of the ORDER_LINE_LOG", p. 6, September 24 2008 Office action. Therefore, Applicants respectfully submit that Downing not only fails to disclose but in fact teaches away the aforementioned claimed limitations because if the format of the virtual table

is defined by the query, the query must change accordingly when the format of the order_line_log changes as a result of one or more changes to the recovery logs. Therefore, Downing not only fails to disclose but in fact teaches away from at least the limitation of “a format of the view **remains unchanged without modifying a query statement** . . . when the format of the at least one of said recovery logs changes” of claims 25, 35, and 45.

Because the Office action does not rely on Lindsay to support the basis for rejection of claims 25, 35, and 45, Applicants respectfully submit that Downing and Lindsay, either alone or combined, may not be used to preclude the patentability of claims 25, 35, and 45, and that Downing may not be combined with other references to support rejections under 35 U.S.C. § 103(a) because Downing teaches away from the claimed limitations of claims 25, 35, and 45.

CONCLUSION

Based on the foregoing, all claims are believed allowable, and an allowance of the claims is respectfully requested. If the Examiner has any questions or comments, the Examiner is respectfully requested to contact the undersigned at the number listed below.

Applicant(s) hereby explicitly retracts and rescinds any and all of the arguments and disclaimers presented to distinguish the prior art of record during the prosecution of all parent and related application(s)/patent(s), and respectfully requests that the Examiner re-visit the prior art that such arguments and disclaimers were made to avoid.

The Commissioner is authorized to charge any fees due in connection with the filing of this document to Vista IP Law Group's Deposit Account No. **50-1105**, referencing billing number **7011443001**. The Commissioner is authorized to credit any overpayment or to charge any underpayment to Vista IP Law Group's Deposit Account No. **50-1105**, referencing billing number **7011443001**.

Respectfully submitted,

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